

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 3-4 have been amended and claims 8-9 have been added as follows:

Listing of Claims:

Claim1 (original): A fully charged state detecting device comprising charging efficiency detecting means for detecting a charging efficiency which indicates a ratio of an electrical quantity to be stored in a battery as electromotive force to an electrical quantity flowed into the battery at any time point from a start of charging to an end of charging of the battery, wherein a fully charged state of the battery is detected when the detected charging efficiency can be regarded as zero.

Claim 2 (original): The fully charged state detecting device according to claim 1, wherein the charging efficiency detecting means detects the charging efficiency of the battery on the basis of a ratio of a difference between an internal resistance value at a time point when a charging of the battery is started and an internal resistance value at any time point from a start of charging to an end of charging of the battery to an internal resistance value in a fully charged state of the battery.

Claim 3 (currently amended): A state-of-charge detecting device for estimating a state of charge indicating an electrical quantity stored in a battery comprising state-of-charge detecting means for detecting a relative value of an electrical quantity stored in the battery at any time point as the state of charge, wherein the electrical quantity stored in the battery at a time point when the fully charged state detecting device according to claim 1 [[or 2]] detects the fully charged state is set to

be 100%, while the electrical quantity stored in the battery at an end of discharging is set to be 0%.

Claim 4 (currently amended): A degradation degree detecting device for estimating a degradation degree of a battery comprising degradation degree detecting means for detecting a relative value of an electrical quantity stored in the battery at a time point when the fully charged state detecting device according to claim 1 [[or 2]] detects the fully charged state as a degradation degree, wherein the electrical quantity stored in a brand-new battery in its fully charged state is set to be 100%, while the electrical quantity stored in the battery at an end of discharging is set to be 0%.

Claim 5 (original): A fully charged state detecting method, characterized in that a fully charged state of a battery is detected when a charging efficiency, which is a ratio of an electrical quantity to be stored in a battery as electromotive force to an electrical quantity flowed into the battery at any time point from a start of charging to an end of charging of the battery, can be regarded as zero.

Claim 6 (original): A state-of-charge detecting method for estimating a state of charge indicating an electrical quantity stored in a battery, characterized in that a relative value of an electrical quantity stored in the battery at any time point is detected as the state of charge, wherein the electrical quantity stored in the battery at a time point when the fully charged state is detected by using the fully charged state detecting method according to claim 5 is set to be 100%, while the electrical quantity stored in the battery at an end of discharging is set to be 0%.

Claim 7 (original): A degradation degree detecting method for estimating a degradation degree of a battery, characterized in that a relative value of an electrical quantity stored in the battery at a time point when the fully charged state is detected by using the fully charged state detecting

method according to claim 5 is detected as a degradation degree, wherein the electrical quantity stored in a brand-new battery in its fully charged state is set to be 100%, while the electrical quantity stored in the battery at an end of discharging is set to be 0%.

Claim 8 (new): A state-of-charge detecting device for estimating a state of charge indicating an electrical quantity stored in a battery comprising state-of-charge detecting means for detecting a relative value of an electrical quantity stored in the battery at any time point as the state of charge, wherein the electrical quantity stored in the battery at a time point when the fully charged state detecting device according to claim 2 detects the fully charged state is set to be 100%, while the electrical quantity stored in the battery at an end of discharging is set to be 0%.

Claim 9 (new): A degradation degree detecting device for estimating a degradation degree of a battery comprising degradation degree detecting means for detecting a relative value of an electrical quantity stored in the battery at a time point when the fully charged state detecting device according to claim 2 detects the fully charged state as a degradation degree, wherein the electrical quantity stored in a brand-new battery in its fully charged state is set to be 100%, while the electrical quantity stored in the battery at an end of discharging is set to be 0%.